

## THE SALVE OF LOVE

By SARAH W. CHAMBLIS

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Every morning after my household duties have been attended to I go out to make my purchases of the day's supplies. I pass a little brick house in a window of which sits, sewing, a woman whose expression I have often studied, but always failed to interpret. It may be best described as the expression of one who has been disappointed, but has accepted the disappointment philosophically. The most surprising thing on the premises is a doorplate on which are the words, "Matrimonial Agency."

Now, I am a happily married woman and in no need of a husband, for mine is the best man in the world. And I am the mother of seven dear children. In short, our family is a loving one. But, having passed the little woman at the window many times, my curiosity at last got the better of me, and I went in. I thought the best way to gain information would be to personate a client. So I invited the woman to explain her methods.

"To begin with," she said, "I don't recommend matrimony to anybody. I'm willing to intercede them as is bankers' after it, but I'm honest enough to tell 'em that it's a good deal like disillusion—it's followed by a headache."

"I should think that would injure your business," I remarked.

"Not a bit. My opinion is when people get the matrimonial fever they get to go through it just like any other fever, only it's worse, because most people get over other fevers within a few weeks or months at most, but the matrimonial fever usually lasts a lifetime. Most times it attacks some fellow and some girl to cut. Such cases can't be stopped. The cases that I put through are those where a man or a woman plies for a mate."

"Now, you're a likely looking woman, and I don't want to do you no harm, but I advise you to let matrimony alone. You'll only jump from the frying pan into the fire. You're used as a single person to do a hundred different things a day, none of 'em, mebbe, of any importance. Just as soon as you're married you got to stop and think whether your husband will approve of your doing any one of 'em the way that suggests itself to you. Or if he's with you he'll tell you that your way is not the best. If you think it really is the best, you got to argue about it. When you've had a scrap over ninety-nine of these little matters during the day, about the time the hundredth comes up you'll be mighty tired of the argument. What kind of a man do you want?"

"She asked the last question apparently well satisfied that she did not consider her warning would be heeded, and having eased her conscience she was ready for business."

"Well," I said, "I think I'd like a man who would always give me my own way about everything. When I'm feeling cross, I would like him to pet me, and if I receive his caresses coldly or snap at him, I'd wish him to still be as pleasant to me as a May morning."

"Look a-here," she interrupted, "I ain't in this business to sell a million dollars' worth of stuff for 75 cents. If you want that kind of a man you'd better go to a heavenly matrimonial exchange and get an introduction to an angel. What kind of a woman be you?"

"So far as human nature will permit, I'm the kind of a woman as the man I've described. I have seven children and sometimes I tire meeting their requirements, but I rub my tiredness with the salve of love and it takes it right out of me. My husband comes home disappointed at some failure he has made during the day; ten to one our boy Jim has fallen into some dirty hole and ruined a suit of clothes, so you see I'm ready to slap at his father, and his father to slap back at me, but before he gets home I get out my love salve and take a good rubbing, and when he appears I am ready to cheer him up."

"The woman followed me with a curious glance while I was saying this and when I stopped said:

"What kind of a fancy picture are you giving me, anyway?"

"It isn't a fancy picture; it's a true one. I'm really married and the mother of seven children. In our medicine closet we keep a big pot of the ointment of love, and my husband and I use it continually. As for the children, they don't need to use it. They are born with love in their hearts for their parents and each other. Perhaps when they grow older a good rubbing with the salve will save them much trouble, but while they are young their irritations are self-healing. From what you have told me I think it possible that you may have tried to keep house without a pot of this ointment in your house. Get your family together and use the love salve freely."

Without any further remark or apology for calling I withdrew. A few days later, when I passed the matrimonial exchange, it was closed. I neither saw nor heard anything from the agent for a year, when I was surprised to receive a call from her.

"I came to thank you for that ointment you gave me," she said. "After you left me I gave myself a good rub with it, then went to see my old man. He's with me, and our younger children are together again. That's powerful good medicine. We use it in our family all the while now."

**A CARD**

We, the undersigned, do hereby agree to refund the money on a 50-cent bottle of Green's Warranted Syrup of Tar, if it fails to cure your cough or cold. We also guarantee a 25-cent bottle to prove satisfactory, or money refunded.

Red Cross Pharmacy, E. A. Drown, C. H. Kendrick & Co., D. F. Davis, George L. Elson, J. D. McArthur, W. B. Miles & Co., McAllister Bros., D. C. Howard, J. A. Cumming, Barre Drug Store, J. W. Parmenter.

## COULD NOT SLEEP WITH ITCHING RASH

All Over Baby's Body, Head and Face. Scratching Made Sores. Used Cuticura Soap and Ointment and Have Had No Further Trouble.

"On July 27, 1909, we left Boston for a trip to England and Ireland, taking baby with us. After being in Ireland a few days a nasty rash came out all over his body. We took him to a doctor who said it was chicken pox, and gave us medicine for him. The trouble started in the form of a rash and was all over baby's body, head and face, at different times. It itched, and he would scratch it with all his might. The consequence was it developed into sores, and we were afraid it would leave nasty scars on his face."

"When we reached England we took baby to another doctor, who said his condition was due to change of food and climate, and gave more medicine. The rash got no better, and it used to itch and burn at night so bad that the child could not sleep. He was completely covered with it at different times. It was at this time that my mother advised us to try Cuticura Soap and Ointment. After using Cuticura Soap and Cuticura Ointment for about nine months the places disappeared. There are not any scars, or other kind of disfigurement, and baby is completely cured by the Cuticura Soap and Ointment. We have had no further trouble with baby's skin. Nothing stopped the itching, and nothing made baby to scratch. Cuticura Soap and Cuticura Ointment." (Signed) Mrs. Margaret Gunn, 29 Burrell St., Roxbury, Boston, Mass., March 12, 1911.

Cuticura Soap and Ointment are sold throughout the world. Send to Pottery Drug & Chem. Corp., Dept. 14A, Boston, for free sample of each with 22-p. book on the skin.

## INSIDE OF EGGSHELL MAKES HUMAN SKIN

Surgeon's Discovery Does Away with Need of Grafting in Cases of Burns.

Philadelphia, Dec. 27.—Dr. Max Staller at Mount Sinai hospital has made the discovery that the white lining of egg shells can be used as a substitute for human skin in grafting operations after burns and scalds.

Experiments at the hospital for three months have been successful in every case. In one case a woman was so severely burned that it was doubted she would live through the operation. She will soon be able to leave the hospital.

It is from the lining of the egg shell that the skin of the chicken is developed. When placed on a burned surface, the membrane becomes larger and larger, until it joins other pieces placed on the flesh at distances of an eighth to a quarter of an inch apart. In the course of weeks, the surface is covered with new skin.

It has long been the custom in cases of serious burns to graft skin from a healthy person to the affected part. In many cases it has been impossible to find persons willing to give their skin, and the patients have died.

Dr. Staller will tell of his discovery at a meeting of the Southeast branch of the County Medical society. He would not discuss the discovery yesterday on ground of professional ethics. Other doctors at the hospital, told of the origin of the treatment, and gave Dr. Staller all the credit for making the discovery.

## NAUSEA AND DEATH FROM ETHER ENDED

Passed Through Warm Water, Anaesthetic's Harmful Properties Eliminated.

New York, Dec. 27.—An improved method of administering ether and chloroform which is said to have reduced the death risk of anaesthesia to nothing and to have eliminated in 90 per cent, of cases the nausea which has usually racked patients after operations—is to be described in a book soon to be published by Dr. James T. Gwathmey, an anesthetist of the Skin and Cancer hospital, and Dr. Charles Baskerville, professor of chemistry at the college of the City of New York.

The method has been used in about 6,000 cases without a single death caused by the anaesthetic.

"Vapor anaesthesia" is what Dr. Gwathmey calls the method. He forces the vapor of ether or chloroform, or a mixture of both, through warm water before letting the patient breathe it. The warmth of the water causes the anaesthetic, instead of irritating the mucous lining of the lungs and bronchial tubes by its coldness, to reach them at approximately blood heat. The water itself absorbs the poisonous aldehydes, which, with the irritation caused by the chill, have caused the nausea.

## TRIES TO KILL FIVE CHILDREN.

Mother Has Fit of Insanity—Two Infants Badly Hurt.

Rochester, N. Y., Dec. 27.—While in a fit of insanity yesterday morning Mrs. Charles Carle of Waterloo, Seneca county, attempted to kill her five children with a paring knife. Two of the children, Mildred, aged two, and Alfred, aged one, were so severely slashed that they were removed to a hospital at Seneca Falls. Three other children escaped by running. The frenzied woman then turned the knife on herself in an attempt to commit suicide and succeeded in cutting an artery in her wrist. She is in a serious condition.

## A Dainty Toilet Article.

Every lady who desires to keep up her attractive appearance while at a theatre, attending receptions, when shopping, while traveling and on all occasions, should carry in her purse a booklet of Gouard's Oriental Beauty Leaves. This is a dainty little booklet of exquisitely perfumed powdered leaves which are easily removed and applied to the skin. It is invaluable when the face becomes moist and flushed and is far superior to a powder puff, as it does not spill and soil the clothes.

It removes dirt, soot and grease from the face, imparting a cool delicate bloom to the complexion. Put up in white and pink and sent anywhere on receipt of ten cents in stamps or coin. F. T. Hopkins, 37 Great Jones street, New York.

## BRITAIN IS APPREHENSIVE

Riot Reports From Persia Alarm London

## THE RUSSIAN ATROCITIES

Tabriz Also Storm Center—Dispatches Say That Persia Is Stupefied by the Russian Outrages.

London, Dec. 27.—The proclamation of martial law at Teheran, following the dismissal of W. Morgan Shuster by the Persian cabinet, and the fragmentary reports received of a bloody massacre by Russian soldiers at Resht, are causing serious apprehension here.

Little additional information regarding the reported massacre has been received. According to the latest advices, the main trouble occurred last Sunday, when the killed at Resht are said to have numbered 600, including some women and children.

Direct dispatches from Teheran make no reference to these serious casualties and a report from the Russian consul at that point states that order is now restored, although he is preparing for further outbreaks.

The strategic point of Tabriz, 350 miles to the northwest of Teheran, is another center of constant and serious collisions between the Russian and Persian elements.

A small force of Russians has been stationed there for some time and has been recently reinforced. The Russian troops have come into contact on several occasions with the populace and one dispatch received here says the Russian artillery swept the streets, while another, through Russian sources, says that a condition of anarchy exists, even the banks being without adequate military guards to protect their funds.

The latter is evidently a suggestion on the part of the Russians that a strong military force is essential to safeguard vested property interests in Persia and as giving an explanation for the decisive exercise of force by the Cossacks at various points.

## ARABS HARD TO REPULSE.

Determined Attack on Ainara in Tripoli Reported.

London, Dec. 27.—The Malta correspondent of The Chronicle sends a letter received from Tripoli describing the recent surprise attack by 10,000 Arabs, with artillery, on Ainara. The attack was so fierce that the Italians were able to repulse the enemy only after six hours of hard fighting, during which they repeatedly requested re-enforcements. Other reports from Tripoli say another determined attack on Ainara is imminent. No serious fighting has taken place during Christmas.

## WOMAN OSBORN'S SECRETARY.

Michigan Governor Introduces an Innovation in the State.

Lansing, Mich., Dec. 27.—For the first time in the history of the state of Michigan, unless Governor Osborn changes his mind, a woman will act as private secretary to the chief executive. Miss Mary E. Hadrich of Marquette, for seventeen years private secretary to Mr. Osborn, and now in the governor's office, as his executive clerk, it is understood, is soon to be appointed his secretary. She assumes her new duties January 1. Though prominent in politics for a number of years, Miss Hadrich is not a suffragette.

## DEATH COINCIDENCE.

Old Man and Wife Expire at Almost the Same Hour.

Wichita, Kan., Dec. 27.—Mr. and Mrs. George Bailey, pioneer residents of this city, who were born on the same day, seventy-six years ago, died within a period of four hours of each other. They were buried here yesterday. Both coffins were lowered into one grave.

Bailey, a veteran of the Civil war, died at his home here. Death came to his wife in an insane asylum in Osawatomie, Kan. Neither knew the other was ill.

## NEGRO KILLS TWO WHITES.

Sheriff Gets Prisoner Away From Mob Reported to Be Forming in Kentucky.

Cairo, Ill., Dec. 27.—Lewis and Frank Ramsey, white, and brothers, were shot and killed near Fulton, Ky., Monday night by Rufus Barfield, a negro, who was later captured by the sheriff. The sheriff took the negro into the woods when he heard that a mob was forming. Later he caught a train for Paducah, where Barfield was put in the McCracken county jail.

## As to Quaker Names.

The man from Kokomo and the man from Kokomo Discussed the Chinese troubles, and the first said, "Don't you know, I think these Chinese names are queer enough to stop a clock."

"That's right!" replied another man from fair Caucasogomoc.

The man from Kokomo observed, "By ginger, that's a fact! That's what my brother says—he lives down here in Hackensack."

And still another stranger said the man's comment was true:

And added, with a smile of pride, "My home's in Kai-mazoo."

Another man took up the strain, "Now, down Skowhegan way And up at Ypsilanti we speak it every day."

The names are all unutilized and beaten in their ring. That's what I told my uncle yesterday in Ishpeming."

"Hoboken is my native town," another said:

"And I think all these Chinese names the worst I ever read."

"Quite true," agreed a quiet man; "they're certainly uncanny, that's what my neighbors all assert in Tail Holt, Indiana."

—Baltimore American.

## MEDICINE Versus NATURE

Why turn yourself into a medicine-chest, filling it with every new concoction that comes along? Nature does the curing, not medicine.

Ask your Doctor if **SUNSHINE AND Scott's Emulsion** is not the treatment for Coughs and Colds, Grippe, and many other ills.

ALL DRUGGISTS 11-63

## HARRY THAW WILL BE FREED IN TWO MONTHS

Hospital Authorities Said to Have Admitted That Release Is Near.

Matteawan, N. Y., Dec. 27.—From a source of reliability which cannot be questioned came an announcement Monday night that Harry K. Thaw, the slayer of Stanford White, who has been a patient in the state hospital for the criminal insane here for several years, will be a free man within two months. The information came from one close to the Thaws and to the hospital authorities, though permission to make public the name of the informant was emphatically denied.

For many months the Thaws have been preparing for another attempt to effect the liberty of the slayer. Detectives have been in their constant employ, and prominent New York lawyers, among them Clarence J. Shears, have been in constant touch with Thaw. Representatives of the lawyers have visited the hospital and have had many conferences with Thaw.

The plan decided upon is to obtain another writ of habeas corpus and demand a trial by jury as to the sanity of the patient. It was said by the informant that Dr. James V. May, medical superintendent of Matteawan, would be called to testify as to Thaw's sanity, and that Dr. May would state that since he has been witnessing Thaw he has not noticed any evidences of dangerous insanity.

Dr. May was asked some time ago to make a statement as to Thaw's condition, and refused. He said he would do so if Thaw ever demanded another hearing, but as a state official he did not think it would be just for him to do so before testifying in court.

The informant also stated that Evelyn Thaw had stood in the way of his release for some time by alleging that he had threatened to kill her if he was freed. It was stated that she was soon to marry again, and was now planning a divorce. A well known New York physician is said to be her intended husband.

Thaw some days ago informed one of the inmates in his ward with whom he has been quite friendly, that he had only a few more months to stay at the hospital, but warned his friend not to repeat the statement to any one. Several attendants who come in close contact with Thaw, state that they are willing to testify that they have watched him carefully for a long time and that no evidence of insanity is noticeable.

## WEDS WHILE THE LOCOMOTIVE IS CHANGED

Bride and Minister Meet Soldier Bound For Philippines at the Station.

Ogden, Utah, Dec. 27.—While his train changed engines here Christmas day, Benjamin J. Garr, private in 15th U. S. infantry, was married to Miss Laura Lund of Ogden. Two minutes after the wedding ceremony, Garr boarded a train and started alone for the Philippines to join his regiment. The order to report immediately came to him when he was en route to the East. Rather than postpone his marriage for two years, the terms of his enlistment, he arranged by telegraph to have his fiancée and a minister at the depot when his train passed through Ogden.

The vows were spoken in the presence of 50 army recruits in the Union depot.

**FIRE IN APARTMENT HOUSE.**

Twelve Members of Theatrical Parties Carried Out—Fire Damage, \$15,000.

Philadelphia, Dec. 26.—Twelve members of theatrical parties playing here, were carried through smoke in their night clothing to safety to-day when fire broke out in the Bernice apartment house in the center of the city. The blaze was extinguished after \$15,000 damage had been done and lots of excitement caused.

## ROUGH SCALY SKIN

LITTLE PATCHES THAT PEEL OFF AND FORM AGAIN

Try This Remedy at Our Risk.

Most skin diseases are eruptions accompanied by itching. But there is another kind in which small patches of scales appear and fall off, followed by another crop. This may spread all over the body and become almost incurable.

A soothing application of Saxon Salve, our new skin remedy, should be made. This is very healing and penetrates through the outer layer of skin to the very seat of the trouble, destroying the germs.

Treated in this way, as directed by the book in the box, the scaly patches disappear and are replaced by smooth, healthy skin. Saxon Salve is wonderfully healing and soothing in all forms of skin diseases, eczema, barber's itch, ringworm, etc., and we guarantee it to satisfy you, paying back your money if it does not. Red Cross Pharmacy, Barre, Vt., Barre, Vt.

**Prevention.**

"Why do you wear a monocle in Parliament?"

"Well, you see," replied the candid tourist, "some of these speeches are drenched with sleep, but you can't well go to sleep, you know, with one eye propped open with a bit of glass."—Washington Star.

## YUAN FOR A REPUBLIC?

In "Full Agreement" With the Revolutionists'

## TANG, HIS ENVOY, SO INFORMS

The Premier Puts the Issue Up to the Manchus—Asks Court to Abide the Decision of a National Congress.

Peking, Dec. 27.—Premier Yuan Shi Kai has submitted to the more prominent Manchus here the proposal emanating from Shanghai for the meeting of a special national convention, in order to decide on the future form of government which shall be adopted for China. This step taken by the premier practically means that he asks the court to decide its own fate because the members of such a national assembly would decide in favor of a republic. If the Manchus agree to adopt the suggestion, their decision to do so will be promulgated as an edict which in all probability will be made public in the course of the day.

Yuan's decision on becoming known at Shanghai caused considerable satisfaction. According to the revolutionary leaders now in Shanghai, Premier Yuan Shi Kai's consent is tantamount to the admission that he himself favors a republic. It is understood that Tang Shao Yi, who is supporting Premier Yuan Shi Kai, has already informed the revolutionary leaders at the peace conference that Yuan Shi Kai personally was in favor of a republic. Tang now admits Yuan Shi Kai is in full agreement with the revolutionary plan, and is only seeking to secure assurances regarding the future treatment of the imperial clan and the Manchus people and also to avoid an outbreak in Peking when the final announcement is made. When Tang had fully realized the true situation in the south, he telegraphed to Premier Yuan Shi Kai, suggesting that an edict should be issued, leaving the decision as to the form of government to the people of China through a national convention. The leaders of both parties at Shanghai say that the convention will be a purely formal affair. There can, in their opinion, be no question regarding the result of such a convention, which they assert can be called together within thirty days.

The present situation, it is said by the revolutionary leaders, was fully anticipated. Every detail of the plans is already complete for the organization of a provisional government and the eventual establishment of a stable government.

## NO DELAY IN THE RICHESON TRIAL

Defense Makes No Move in That Direction, and Jury Summoned Are Sent Out.

Boston, Dec. 27.—That the government is in earnest in its intention to try Rev. Clarence V. T. Richeson on Jan. 15 for the murder of his former sweetheart, Miss Avis Linnell, the music student of Hyannis, was still further shown yesterday, when summonses were issued for 300 citizens of Suffolk county to serve on the special jury panel.

For a day or two after Richeson mutilated himself in his cell, there were rumors that counsel would move to ask for a postponement of the trial, and the summonses were withheld until just before the expiration of the legal time for service. No move having been made, District Attorney Pelletier ordered the venire yesterday, and at noon two score policemen in Boston, Chelsea, Revere and Winthrop started out with the formal notices from the clerk of the superior criminal court.

It is reported that Richeson's recovery from his self-inflicted wounds continues satisfactorily to his physician, and that he was allowed to walk about his cell yesterday.

## WOULD HAVE SECRET TRIAL.

Attorney Drafts Legislative Bill to Exclude Press and Public.

Boston, Dec. 27.—An attempt to have a private trial for Rev. C. V. T. Richeson, accused of the murder of Avis Linnell by poison, was made yesterday with the filing by a local attorney of a petition to the incoming legislature to enact a statute excluding from the courtroom all persons not connected with any case involving the decency and morals of the community.

As the legislature will convene January 3, no action in adopting the proposed bill would make it effective in the Richeson case.

Richeson is regaining strength rapidly and was allowed to walk about his cell a few minutes yesterday.

## INDICTED FOR DEATH OF MISS MARY BOLDUC

Mrs. Reed and Miss O'Neil Named as Principals in the Bill—Dr. Ferguson, Mrs. Shattuck and Miss Hazlett Charged as Accessories.

Boston, Dec. 17.—Indictments in seven counts were returned yesterday at a special session of the grand jury against the five prisoners held on suspicion of causing the death of Mary Bolduc, whose decomposed body was found in a Forest Hills apartment house last Friday.

Mrs. Annie M. Reed, who conducted a Tremont street house, and Miss Mary A. O'Neil, assistants in the employ of Dr. John D. Ferguson of Manchester, N. H., were indicted as principals in performing an illegal operation.

Dr. Ferguson, Mrs. Jennie M. Shattuck and Hattie M. Hazlett were each indicted as accessories before and after the fact.

**Estimate of the Potash Content.**

A conservative estimate may be had by assuming an average width of ten feet in the principal vein, neglecting other veins, and assuming a total proved length of deposit at the present time as about 3,500 feet; the surface area of the outcrop is probably greater than 35,000 square feet. The rock weighs approximately 175 pounds to the cubic foot, so that an acre of ground underlain to the depth of one foot would contain about 3,500 short tons of alunitic. The area at present estimated for this deposit is somewhat less than an acre, and if it averages only ten feet in width it would contain approximately 300,000 tons of the rock for each 100 feet of depth, so long as the deposit maintains its surface dimensions and quality. Estimating the recoverable potash at 10 per cent. of this ore, each 100 feet in depth should yield 30,000 tons in terms of the latest retail \$20. Thus, 100 feet of this vein expressed commercially represents perhaps only a sixth of the annual imports of potash salts.

## NEW DEPOSIT OF ALUNITE.

Discovered Near Marysville, Utah, Says Geological Survey.

An important deposit of alunitic, which has but recently been discovered near Marysville, Utah, is now being developed with so favorable a showing that it promises to afford one source of the much desired class of materials commonly referred to under the term potash.

Federal geologists visited this locality in March and November of the present year. The Marysville alunitic deposits are described in a report by B. S. Butler and Hoyt S. Gale, issued as an advance chapter of "Contributions to Economic Geology, 1911," which will be ready soon for distribution. This report may be had by application to the director, United States Geological Survey, Washington, D. C. As shown in this report, while the deposit furnished material of character well adapted for utilization, the quantity thus far revealed is insufficient to supply the whole United States with potash. However, it is favorably located to compete with foreign potash in supplying the needs of the western orchards.

Although a large vein of "pink spar" in the hills southwest of Marysville had long been known to prospectors and had been repeatedly located for the sake of small metalliferous values, said to be found in the siliceous wall rocks of the spar, it was not until 1910 that the true nature of the pink spar was discovered, and on January 1, 1911, the claims that had been allowed to lapse were re-released for the sake of the newly recognized deposit. Thomas Gillan of Itzehild had sent specimens to the United States assay office at Salt Lake in November, 1910, and these had been forwarded to an eastern chemist, who is said to have recognized the real value of the material.

## Alunitic a Potash-Rich Mineral.

The mineral alunitic, otherwise known as alunitic, is a hydrous sulphate of aluminum and potassium, containing 38.5 per cent. of sulphur trioxide, 37 per cent. of alumina, 11.4 per cent. of potash, and 13 per cent. of water. Samples of the Marysville rock have been analyzed by W. T. Schaller in the geological survey laboratory, and the results have shown a very close approximation to the theoretical composition of the mineral as quoted above. In the United States, alunitic is known at several places in Colorado—in the Roan Hills, Custer county; on Calley Peak, near Rico; in the National Belle mine, near Silverton; and at Cripple Creek. It occurs also at Tres Cerritos, Mariposa county, Cal.; associated with the gold ores at Goldfield, Nev., and in the Cactus range east of Goldfield; at the Rabbit Hole sulphur mines, near Humboldt House, Nev.; in the Morenci and Hiscoc districts, Ariz.; and in the Frisco district, Beaver county, Utah.

In some of these places it is supposed to have been produced by the filtration of potash feldspars which have been acted on by acid solutions. If the alterations are the result of descending acid solutions derived from the oxidation of pyrite, the resulting deposit will not presumably extend below the surface zone of oxidation, but if they have been due to ascending acid solutions of volcanic or other origin they may be expected to extend to greater depths.

The Utah deposit is situated near the head of Cottonwood canyon, about seven miles in a course due southwest of Marysville, Piute county. It is located in and near sec. 16, T. 28 S., R. 4 W., and so far as now known is covered by mining claim locations. Marysville is the present terminus of a branch of the Denver & Rio Grande railroad. The deposit is found high in the Tuslar range, outcropping near the crest of a ridge that leads from the main divide at an elevation of approximately 11,000 feet above sea level, and extends down to about 9,000 feet, the lower end being about 4,000 feet above the railroad at Marysville.

## Extent of the Vein.

The deposit at Marysville is a somewhat uncommon occurrence in this country. It consists of a large and very pure vein, apparently a true fissure filling, as the mineral alunitic occurs in uniformly banded crystalline structure without evidence of replacement of other substances on any considerable scale. The alunitic here is massive and is found both in bodies of compact earthy or granular texture and in clear crystalline masses, varying from white to a decided pink color. The vein has a northwest-southeast course, has been traced by prospecting for a distance of about 3,500 feet along the outcrop; and is known to outcrop in the extension of the same course half a mile or more beyond the prospecting ground. It apparently stands nearly vertical in part, but toward the southern extension of the outcrop appears to be inclined to the southwest at a steep angle. The wall rocks are a much silicified portion of the volcanic flows which form the greater part of the Tuslar range. The size of the vein and apparent purity of the material are probably its most unusual features. According to a number of measurements made from the present incomplete developments, there is in one place at least 20 feet of solid alunitic in the largest vein and six feet in a parallel vein some 25 feet away, with considerable quantities of alunitic rock and alternating purer alunitic and siliceous wall rock intervening. This low-grade rock may possibly extend beyond that shown in the present pits. Other measurements made reveal less thicknesses, but in each case it is doubtful whether the trenches that have been dug expose all the alunitic that may be present.

**Estimate of the Potash Content.**

A conservative estimate may be had by assuming an average width of ten feet in the principal vein, neglecting other veins, and assuming a total proved length of deposit at the present time as about 3,500 feet; the surface area of the outcrop is probably greater than 35,000 square feet. The rock weighs approximately 175 pounds to the cubic foot, so that an acre of ground underlain to the depth of one foot would contain about 3,500 short tons of alunitic. The area at present estimated for this deposit is somewhat less than an acre, and if it averages only ten feet in width it would contain approximately 300,000 tons of the rock for each 100 feet of depth, so long as the deposit maintains its surface dimensions and quality. Estimating the recoverable potash at 10 per cent. of this ore, each 100 feet in depth should yield 30,000 tons in terms of the latest retail \$20. Thus, 100 feet of this vein expressed commercially represents perhaps only a sixth of the annual imports of potash salts.

Among other observations, W. T. Schaller adds the following to the report of the analyses of the Marysville rocks: "The water and that portion of the sulphuric acid combined with the alumi-

## Light Cake Is Good for Children

Sponge cake, cup cakes, angel cake—all cakes that are not overrich in butter and heavy ingredients are splendid foods for growing children. Make them from William Tell Flour and you double their food qualities.

Milled only from the finest Ohio Red Wheat, our special process, making it richest in nutritive value.

Your grocer keeps it. Order to-day.

Howard Brothers, Distributors, South Barre, Vermont.

na are driven off by ignition, so that about one-third of the remaining residue (55.6 per cent. of the original material) is soluble potassium sulphate and two-thirds insoluble aluminum oxide."

It seems, therefore, that little difficulty should be encountered in establishing a practical process for the reduction of alunitic by which potash may be obtained as the sulphate, one of its most desirable commercial forms, and alumina in a form presumably available for the production of metallic aluminum.